PUBLIC-PRIVATE PARTNERSHIPS FOR TOLL HIGHWAYS

Testimony of Robert W. Poole, Jr.
Director of Transportation Studies
Reason Foundation

Subcommittee on Highways and Transit
House Committee on Transportation and Infrastructure

February 13, 2007

Reason Foundation
3415 S. Sepulveda Blvd., Suite 400
Los Angeles, CA 90034
310-292-2386
www.reason.org/transportation
bobp@reason.org

My name is Robert W. Poole, Jr. I am the director of transportation studies at the Reason Foundation, a pubic policy research institute based in Los Angeles. I have been researching privatization and public-private partnerships (PPPs) since the late 1970s, and transportation PPPs since the late 1980s. In 1988 I wrote the Reason policy paper that led to California's pioneering private toll road pilot program, which brought about two of the first U.S. toll road concession projects. I have advised the departments of transportation of half a dozen states, along with the U.S. Department of Transportation and its Federal Highway and Federal Transit Administrations. I have also served on several special committees of the Transportation Research Board dealing with highway finance issues.

Today's hearing is being held because the last two years have seen a major increase in interest, on the part of investors and toll road companies, in the U.S. highway market. The underlying reason for this interest is the large and growing funding shortfall in the highway sector. The most recent Conditions and Performance Report from the Federal Highway Administration estimated annual capital investment in our highways at $68 billion—yet simply to properly maintain the condition of our highways and bridges, we should be spending $6 billion more every year. And to improve the system, to cope with increases in auto and truck travel, we should be spending $51 billion more every year.

The existing state and federal fuel tax and highway trust fund system seems to be unable to meet these investment needs. Neither the Congress nor most state legislatures have increased fuel taxes to levels that would even offset increases in fuel efficiency and the ravages of inflation, let alone coping with increased travel demand. So increasingly, states are turning to toll finance and PPPs to begin to fill the funding gap.

The newest trend is the rediscovery of the long-term concession model of public-private partnership. Under this model, in exchange for a long-term license to operate a toll road, an investor-owned company will finance, design, build, operate, modernize, and maintain a highway project, financing its expenditures from the toll revenues it is allowed to charge. This is a modernized version of the toll road charters issued by governments in the U.K. and states in the USA in the 18th and 19th centuries for the original turnpikes in both countries. It was revived in the 1990s with the Dulles Greenway in Virginia and the 91 Express Lanes and SR 125 toll projects in California.

This model is what built most of the postwar toll motorway systems in France, Italy, Portugal, and Spain. That's why investor-owned companies from those countries are among the world leaders in the toll road business. Australia discovered this model in the 1980s, and today both Melbourne and Sydney are well-served by modern urban toll roads—and two Australian companies have become investors in the U.S. toll road market. The model was adopted in Latin America in the 1990s, especially in Argentina, Chile, and Brazil. And today the concession model is being used, as well, in Canada, Britain, Ireland, Germany, Norway, Greece, as well as Eastern Europe.

Essentially what this model is all about is extending the investor-owned utility concept from network industries like electricity and telecommunications to the network industry of limited-access highways. Just as those vital industries are affected with the public interest, so too is the highway industry. And just as the public sector has a role to play in protecting the public interest in those network industries, so it has a comparable role to play in the highway industry.

What has worked best around the world for protecting the public interest is to incorporate detailed provisions and requirements into the long-term concession agreement. And the issues that need to be addressed in the concession agreement turn out to be pretty much the same, whether the agreement concerns the leasing of an existing toll road or the development of a new one. Over the span of 50 or 75 years, major construction or reconstruction will be required in either case, so all such concession agreements must address the same set of issues. The only major differences between agreements for existing toll roads and those for new ones is that the former involve large new revenues for the states and smaller construction commitments, while the latter involve much higher levels of initial risk for the private partner, including very large construction commitments.

Advantages of Long-Term PPPs

Since toll finance can help this country close the financing gap, why not simply rely more on traditional public-sector toll agencies to do the job? In working on these issues for the past two decades, I have identified six important advantages of the PPP concession model.

<u>1. Access to large new sources of capital.</u>
The tax-exempt toll revenue bond market appeals to one particular class of investors: people who pay taxes and like the ability to add tax-exempt bonds to their portfolios. The concession model opens the door to equity investors as well as lenders. And especially important, it opens the door to institutional investors such as pension funds that do not purchase tax-exempt bonds because they don't pay taxes. Infrastructure has become a fashionable asset class for a host of investors that don't invest in toll-agency bonds. Michael Wilkins of Standard & Poor's recently estimated that $100-150 billion was raised last year to invest in infrastructure. Goldman Sachs alone recently raised over $6.5 billion to invest in infrastructure. All this should be welcome news to those of us who have been concerned over the huge shortfall in U.S. highway investment.

<u>2. Ability to raise larger sums for toll projects.</u>
New highway capacity is far more costly these days than it was when the Interstates were built. Hence, rebuilding and modernizing our freeways and Interstates will be far more costly than most people realize. There is growing evidence that the long-term concession model can raise significantly more funding for a given toll project than the traditional toll agency financing model. For a new toll road in Texas, for example, a toll traffic and revenue study estimated the ability to finance $600 million, but the project's cost was $1.3 billion. Texas DOT turned to a long-term concession approach, in which the private sector will finance the entire $1.3 billion project, in exchange for a 50-year concession. Three factors seem to drive such results. First, the concession agreement adds certainty to future toll increases that always far less predictable with toll agencies. Second, the private

sector seems more aggressive in both attracting traffic and in reducing costs (e.g., by making full use of electronic toll collection). And third, the private sector can take depreciation as a tax write-off, like any other business, but toll agencies can't, since they pay no income taxes.

3. Shifting risk from taxpayers to investors.

Public-private partnerships involve parceling out duties and risks to the party best able to handle them. Thus, the state is the party best able to handle right-of-way acquisition and environmental permitting, so those tasks and risks are assigned to the state. The private sector in these deals nearly always takes the risks of construction cost overruns and possible traffic and revenue shortfalls. Given the poor track record of the public sector in transportation mega-projects (e.g., Boston's Big Dig), being able to shift construction and traffic/revenue risk to investors is a major advantage.

4. Multi-state potential.

One of the most important unmet needs for highway investment is to cope with the growth in truck traffic. Much long-haul truck traffic involves several states, connecting a port or other origin to a major destination (such as a logistics hub). State toll agencies are legally limited to doing projects within their own state. By contrast, now that both are privatized, the Chicago Skyway and the Indiana Toll Road are being managed jointly, as an integrated system. Long-term concessions are a good vehicle for organizing multi-state projects such as truck-only toll lanes to serve major shipping routes. These projects need to be developed in a unified manner, offering seamless service from origin to destination. The federal government can continue to play a vital role in standardization, but individual states or their toll agencies are not well-positioned to develop such unified projects; concession companies are.

5. More businesslike approach.

There are some very businesslike toll agencies, but most are constrained in significant ways by being part of the public sector. Many toll agencies are run by short-term political appointees, rather than by career toll road professionals. Some also are constrained to deal with politically favored contractors. Some come under civil service rules, which may prevent them from attracting the best talent or paying market rates for people. They offer more-limited career paths for professionals, due to their being limited to a single state and perhaps a handful of toll roads. And some have been very slow to adopt cost-saving, customer-friendly technology such as electronic toll collection. Comparing the typical U.S. toll agency with the typical European or Australian toll road company, it's clear that the latter are far more customer-oriented, more innovative, and generally more commercial in their approach to the business of toll roads.

6. Major innovations.

One of the most important advantages of investor-owned toll road companies is their motivation to innovate, in order to solve difficult problems or improve their service to customers. Here are three examples:

- Today, we know that variable pricing (also known as value pricing) works very well to eliminate traffic congestion during peak periods, actually maximizing throughput while maintaining high speeds. Electronic toll collection makes value pricing possible—but it was a private toll company in California that took the initiative to introduce and perfect value pricing; no state toll agency was willing to take the risk of doing so.

- Toll road companies are also good a value engineering—thinking outside the box to dramatically reduce the costs of new capacity. A case in point is the forthcoming HOT lanes on the Beltway in northern Virginia. Virginia DOT's plan to add two HOV lanes in each direction on that section of the Beltway would have cost $3 billion—money that VDOT did not have. The private sector team's unsolicited proposal called for adding two HOT lanes in each direction, the same amount of physical capacity. That project will cost about $1 billion, thanks to value engineering that reduced or eliminated many "bells and whistles" that added large costs but very little real benefit.
- In France, an unsolicited proposal from a private toll firm resolved a 30-year impasse over completing the missing link—through Versailles—of the A86 Paris ring road. The company is completing the link as a deep-bore tunnel *underneath* Versailles, and is financing the $2 billion project with value-priced tolls.

Misconceptions About Toll Road Concessions

Although it has been used successfully in Europe for some 40 years, the long-term toll road concession model is still novel in America. So it is understandable that people are still trying to understand what it is all about. Here are some common concerns and my responses to them.

<u>1. Sale vs. lease</u>
None of the transactions that have occurred or are being planned—either for existing toll roads or for new ones—involves the *sale* of any roads. Some forms of PPP involve short-term contracts to design and build a road or bridge, or to design, finance, and build it. The most dramatic form—the long-term toll concession—still involves only a long-term lease, not a sale. The government remains the owner at all times, with the private sector partner carrying out only the tasks spelled out for it within the concession agreement and according to the terms set by the state. Done properly, these deals are truly partnerships, in which the state does what it does best (right of way, environmental permitting, policymaking, enforcement of performance requirements, etc.) and the concession company does what it does best (design, finance, construction, operation, marketing, customer service, etc.).

<u>2. Foreign investment</u>
In the early years of U.S. adaptation of the concession model, states want to deal with firms that have extensive experience as toll road providers. The simple fact is that the United States has no such industry, as yet, because we have used only public-sector agencies to build and operate toll roads. Thus, a responsible state government, wanting to ensure that the toll road is in experienced, professional hands, will weight prior experience very heavily in its selection criteria. As the U.S. market matures, we will see the emergence of a U.S. industry. Already, joint ventures between U.S. and global

companies are bidding on such projects—Fluor/Transurban, Zachry/Cintra, Kiewit/Macquarie, to name several recent examples. Likewise, U.S. financial institutions have been creating multi-billion-dollar infrastructure investments funds, so these deals are about to start tapping U.S. capital in a major way. It's important to remember that even deals that involve 100% non-U.S. companies are very good for the U.S. economy. Attracting billions of dollars in global capital (and expertise) to modernize America's vital highway infrastructure is a large net gain for this country. We might keep in mind that 150 years ago, European capital played a major role in creating America's railroad network.

3. Eminent domain

There is understandable concern that toll road privatization might lead to private companies acquiring the power to condemn land for right of way. To the best of my knowledge, none of the nearly two dozen state PPP enabling acts has delegated any such power to private partner companies. The eminent domain power is always reserved by the state, in its traditional role of acquiring rights of way for public-use infrastructure. Toll road companies with the available use of eminent domain by their state DOT partner have tended to avoid its use wherever possible, preferring to acquire land by negotiation.

4. Uncontrolled tolls

There are concerns that PPP deals will lead to sky-high toll rates in future years, leaving the impression that tolls are uncontrolled. That is not the case in any actual or proposed PPP toll road that I'm aware of. Most concession agreements, to date, have incorporated annual caps on the amount that toll rates can be increased, using various inflation indices. It is important to note that those caps are *ceilings*; the actual rates a company will charge depends on market conditions. Before entering into any toll road project, a company (or a toll agency) does detailed and costly traffic and revenue studies. A major goal of such studies is to determine how many vehicles would use the toll road at what price; too high a toll rate means fewer choose to use the toll road, which generally means lower total revenue. So the toll road must select the rate that maximizes total revenue. That rate may well be lower than the caps provided in the concession agreement, especially in recession years.

There are some cases, such as HOT lanes or Express Toll Lanes, where a main purpose of value-priced tolling is to manage traffic flow. In those cases, pre-defined limits on toll rates defeat the purpose. Those rates must be allowed to vary, as needed, to keep traffic flowing freely at the performance level specified—such as Level of Service C. When such value-priced lanes are operated under a concession agreement, instead of limiting the toll rates, the agreement should limit the rate of return the company is allowed to make, with any surplus revenues going into a state highway or transportation fund. That is how California's original pilot program for long-term concessions dealt with the issue, and similar deals have been done in Texas and Virginia.

5. Up-front payments versus long-term revenue sharing

Many have expressed concern that Chicago and Indiana opted to take all of their lease payments from their concession companies up-front, as a lump sum payment. In each case, the governments in question are using those proceeds largely or entirely for debt retirement and/or capital expenditures, with Indiana investing all their proceeds in long-lived highway improvements. But there is clearly a trade-off between up-front payment versus ongoing lease revenues over the life of the agreement. Several recent concession agreements—the Pocahontas Parkway in Virginia and the SH 130 (segment 5 and 6) in Texas—involve a small up-front payment and revenue sharing in later years. In Britain there have been concession agreements with annual fees paid to the government. The trade-offs for a state entering into a concession deal are twofold: (1) current capital needs versus long-term needs, and (2) sure thing (up-front payment) versus some risk as to what future revenues may be. There is clearly no single right answer; each state must weigh the trade-offs involved with each individual project.

6. Could the public sector do equally well?

Some commentators, such as Dennis Enright of NW Financial Group, have argued that a public-sector toll agency could raise just as much money as is being realized via the lease of existing toll roads by aggressively refinancing their toll roads. I disagree with that assessment. The single most important factor driving the higher valuation accorded to concession toll road deals is the certainty of being able to raise toll rates over the life of the agreement. No one has yet figured out a way to bind future elected officials from interfering in the toll-setting decisions of state toll agencies—and the capital markets take that into account in judging what they will finance. But by allowing the state to enter into concession agreements—which are legally enforceable long-term contracts—a legislature can choose to limit its future ability to intervene in toll-setting decisions. This is analogous in some respects to Congress's innovation in creating a base-closing process with which individual members cannot intervene. Both change the rules of the game in ways that create economic value.

7. Losing control

The widely expressed fear that states will lose control of vital highways reflects a misunderstanding of the true partnership created by the long-term concession agreement. These documents typically run to several hundred pages, and may incorporate other documents (e.g., detailed performance standards) by reference. Hence, ensuring that the public interest is well-protected is the key challenge in drafting such agreements. It is vital that a state planning to make use of such agreements hire and pay for top-quality legal and financial expertise to assist it in drafting and negotiating concession agreements. The agreements need to spell out who pays for future expansions and reconstruction, how decisions on the scope and timing of those projects will be reached, what performance will be required of the toll road, how to deal with failures to comply with the agreement, provisions for early termination of the agreement, what protections (if any) will be provided to the company from state-funded competing routes, what limits on toll rates or rate of return will be, etc. Most importantly, the concession agreements spell out procedures for amending the agreement itself without unfairness to either party. Neither the City of Chicago nor the State of Indiana has bound itself irrevocably to the initial terms of their concession agreement for 75 or 99 years. (Indeed, Indiana and its concession company negotiated a major amendment to their agreement, delaying toll increases for commuters, between the time the concession was signed and the date it went into effect.)

Fortunately for the United States, we do not need to start from scratch, since Europe has four decades of experience with toll road concessions, and Australia and Latin America also have valuable experience we can draw from.

Summing Up: 21st Century Highways

The two mainstays for highway finance and development in 20th century America were the fuel tax plus highway trust fund and the state toll agency. Both played key roles in developing a high-quality urban and inter-city roadway network. But as we move into the 21st century, we have come to see that both have serious limitations.

The tax and grant system has run into serious problems of raising enough money even to maintain the physical condition of our existing road system. And most state toll agencies fall well short of the performance and financing ability of the toll road concession system now widely used in Europe, Australia, and Latin America for limited-access roadways.

In the 20th century, America showed the world that investor-owned electric, gas, and telecommunications utilities worked better than the state-owned utilities then carrying out these functions in virtually all other countries. Late in the century, nearly every developed country privatized those utilities, learning from the U.S. model. But even before doing that, those countries had developed the concession model for investor-owned roadway utilities, mobilizing billions in private capital to develop high-quality toll motorway systems, both urban and intercity. Now it's time for us to learn from our counterparts overseas, adapting the concession model to U.S. highway needs.

We should be grateful that the hard work of figuring out how to protect the public interest while drawing on private capital and private-sector expertise has largely been done by our counterparts in Europe and Australia. All we need do is tailor and fine-tune their models. We should also be grateful that the global capital markets have discovered the U.S. highway market, just when we need to mobilize hundreds of billions of dollars to rebuild and expand our highway network.

As the think tank that has done the most research on public-private partnerships and their applicability to transportation infrastructure, the Reason Foundation welcomes the opportunity to be of further assistance to the Congress, as you learn more about these new approaches. Please feel free to call upon us.